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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,695	04/19/2001	Michael Dove	BU1327	8988

7590
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P.O. Box 52050
Minneapolis, MN 55402

04/17/2007

EXAMINER

SAX, STEVEN PAUL

ART UNIT	PAPER NUMBER
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2174

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/838,695	DOVE, MICHAEL	
	Examiner	Art Unit	
	Steven P Sax	2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This application has been examined. The amendment filed 10/19/06 has been entered.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akatsu et al (6523064) and Raheman (7039872) and Sadamatsu (JP 07073181A).

4. Regarding claim 1, Akatsu et al show an apparatus for producing a perceptible representation of data, including: an arbiter (column 6 lines 5-30) selecting a dominant program from among a plurality of programs seeking a master persistence attribute to display data of the program according to a predetermined priority technique (column 6 lines 15-50, column 8 lines 30-60, column 11 lines 25-60), and assigning the master persistence attribute to the dominant program (column 14 lines 10-55, column 15 lines 25-60). Akatsu et al do not specifically state that the dominant program displays data concurrently with other programs while not being obscured by them and also does not show the scheme per se, but do show displaying data for efficient viewing.

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Furthermore, Raheman does show displaying multiple program windows such that a dominant (active) one displays data concurrently with other windows while not being obstructed by them according to a predetermined priority scheme (Figures 2, 4, column 4 lines 20-30, column 6 lines 12-45) to display data for efficient viewing. It would have been obvious to a person with ordinary skill in the art to have the dominant program in Akatsu et al display data concurrently with other programs while not being obscured by them according to a predetermined priority scheme, because it would allow displaying of data for efficient viewing. Neither Akatsu et al nor Raheman specifically show that the dominant program itself overlaps other programs, or that the technique used by Akatsu et al is a hierarchy, but Akatsu et al for example do mention indicating priority to a dominant program. Furthermore, Sadamatsu shows indicating priority to a dominant or currently active program by diving to it within a stack and showing it overlapping those applications whose windows are under its window (abstract, Figure 2). This is done in sadamatsu also for efficient viewing of displayed data, which is also taught by Raheman. Thus, it would have been obvious to a person with ordinary skill in the art to have the dominant program overlap other programs in the system suggested by Akatsu et al and Raheman, because it would allow an efficient way to view displayed data, while indicating priority to a dominant window.

5. Regarding claim 2, the access control table is coupled to the arbiter containing indicia representative of the priority scheme (Akatsu et al column 10 lines 50-64, column 11 lines 10-25).

6. Regarding claim 3, also coupled to the table is the configuration application program (Akatsu et al column 7 lines 30-40, column 11 lines 28-50).
7. Regarding claims 4, the I/O manager coupled with the arbiter communicates display data between the application program and a display (Akatsu et al column 12 lines 12-53).
8. Regarding claim 5, a graphics device driver coupled with the I/O manager and display transmits the display data to the display (Akatsu et al column 12 lines 12-53).
9. Regarding claim 6, in addition to that mentioned for claim 5, the graphics device driver is coupled with the arbiter (Akatsu et al column 12 lines 12-53).
10. Regarding claim 7, the indicia includes a priority (Akatsu et al column 6 lines 5-28. Only one of these need be met to satisfy the claim).
11. Regarding claim 8, the arbiter has a content addressable memory that provides the priority scheme (Akatsu et al column 10 lines 50-63).
12. Regarding claim 9, a gatekeeper determines selected programs to be granted access to the arbiter (Akatsu et al column 6 lines 30-64, column 14 lines 25-55).

13. Regarding claim 10, Akatsu et al show a graphic display apparatus having a gatekeeper determining selected ones of a plurality of programs to be granted a key to request a persistence attribute according to a predetermined access scheme (column 6 lines 30-64, column 14 lines 25-55). Akatsu et al do not specifically state that the persistence attribute enables a program upon receipt to display data concurrently with other programs while not being obscured by them according to a predetermined priority scheme, but do show displaying data for efficient viewing. Furthermore, Raheman does show displaying multiple program windows such that a dominant (active) one displays data concurrently with other windows while not being obstructed by them according to a predetermined priority scheme (abstract, Figures 12, 16, column 5 lines 30-54) to display data for efficient viewing. It would have been obvious to a person with ordinary skill in the art to have the persistence attribute enable a program in Akatsu et al to display data concurrently with other programs while not being obscured by them, according to a predetermined priority scheme, because it would allow displaying of data for efficient viewing.

14. Regarding claim 11, the graphics display driver, coupled with the gatekeeper, couples display data of the selected ones with a display (Akatsu et al column 12 lines 12-53).

15. Regarding claim 12, Akatsu et al show the arbiter (column 6 lines 5-30) selecting a dominant program from among a plurality of programs seeking a master persistence attribute to display data of the program according to a predetermined priority technique (column 6 lines 15-50, column 8 lines 30-60, column 11 lines 25-60), and assigning the master persistence attribute to the dominant program (column 14 lines 10-55, column 15 lines 25-60).

16. Regarding claim 13, the access control table is coupled to the arbiter containing indicia representative of the priority scheme (Akatsu et al column 10 lines 50-64, column 11 lines 10-25).

17. Regarding claim 14, the I/O manager is coupled with the gatekeeper and manages graphical data between the selected ones and the display (Akatsu et al column 12 lines 12-53).

18. Regarding claim 15, an application manager is coupled with the gatekeeper to prevent unauthorized access to an operating system by the selected ones (Akatsu et al column 6 lines 20-50, column 8 lines 30-50).

19. Regarding claim 16, the graphics driver, coupled with the application manager, transmits graphical data to display data on the display (Akatsu et al column 12 lines 12-53).

20. Regarding claim 17, a configuration application program, coupled with the gatekeeper, configures the gatekeeper with the predetermined priority scheme (Akatsu et al column 6 lines 15-50, column 10 lines 50-64).

21. Regarding claim 18, the configuration table, coupled to the gatekeeper, stores indicia representative of the predetermined priority scheme (Akatsu et al column 10 lines 50-64, column 11 lines 10-25).

22. Regarding claim 19, the indicia includes a priority (Akatsu et al column 6 lines 5-28. Only one of these need be met to satisfy the claim).

23. Claim 20 recites the same features as claim 12 and is rejected for the same reasons.

24. Regarding claim 21, Akatsu et al show the configuration table, coupled with the gatekeeper, containing indicia representative with the predetermined priority scheme (column 10 lines 50-64, column 11 lines 10-25. Only this choice needs to be met to satisfy the claim as it is recited in alternative form).

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25. Regarding claim 22, the configuration application couples with the configuration table to configure the gatekeeper (Akatsu et al column 12 lines 20-50. Only this need be shown to satisfy the claim as it is recited in alternative form).

26. Regarding claims 23, the I/O manager coupled with the arbiter communicates display data between the application program and a display (Akatsu et al column 12 lines 12-53).

27. Regarding claim 24, a graphics device driver coupled with the I/O manager and display transmits the display data to the display (Akatsu et al column 12 lines 12-53).

28. Regarding claim 26, a graphics device driver coupled with the arbiter transfers the display data to the display (Akatsu et al column 12 lines 12-53).

29. Regarding claims 25 and 27, a display buffer is coupled with the graphics display driver (Akatsu et al Figure 2, column 5 lines 1-10, implicit).

30. Regarding claim 28, the I/O manager coupled with the graphic display driver communicates display data between the application program and a display (Akatsu et al column 12 lines 12-53).

31. Regarding claim 29, the application manager is coupled with the gatekeeper to prevent unauthorized access to an operating system by a program (Akatsu et al column 6 lines 20-50, column 8 lines 30-50).

32. Regarding claim 30, the indicia includes a priority (Akatsu et al column 6 lines 5-28. Only one of these need be met to satisfy the claim).

33. Regarding claim 31, Akatsu et al show the video input receiving the graphical signal and the video output coupled with a display (Figures 6, 7, column 5 lines 1-30), a display controller coupled with the video input signal and selectively transmitting the graphical data signal to the video output (column 5 lines 10-45), an arbiter (column 6 lines 5-30) coupled with the display controller effecting the selectively transmitting by granting a persistence attribute according to a predetermined priority technique to a window for displaying on a display (column 6 lines 15-50, column 8 lines 30-60, column 11 lines 25-60), the display controller transmitting accordingly, wherein the video output writes data to a set of pixel memory locations which are later read by the display (column 5 lines 10-45). Akatsu et al do not specifically state that the window granted the persistence attribute has exclusive access to a portion of the set of pixel memory locations per se, but do mention convenient access of data among plural programs. Furthermore, Raheman shows that a given (active) window does in fact have exclusive access to its portion of the set of pixel memory locations, such that all program windows are conveniently accessed. It would have been obvious to a person with ordinary skill in

the art to have the window granted the persistence attribute have exclusive access to a portion of the set of pixel memory locations, because it would allow convenient access of data among plural programs. Neither Akatsu et al nor Raheman specifically mention that the persistence granted window takes the place of another window which would have access to the portion of the pixel memory locations, but Akatsu et al for example do mention indicating priority to the persistence granted window. Furthermore, Sadamatsu shows indicating priority to a current persistence/active granted program by diving to it within a stack and showing it taking the place of other windows which would have access to the portion of pixel memory locations which are under its window (abstract, Figure 2). This is done in Sadamatsu also for efficient viewing of displayed data, which is also taught by Raheman. Thus, it would have been obvious to a person with ordinary skill in the art to have the persistence granted program take the place of other windows which would otherwise have access to the portion of pixel memory locations, in the system suggested by Akatsu et al and Raheman, because it would allow an efficient way to view displayed data, while indicating priority to a persistence granted program.

34. Regarding claim 32, Akatsu et al show the CPU interface coupled to the CPU receiving display control signals and the arbiter being responsive thereto (column 5 lines 1-20; column 6 lines 5-23).

35. Regarding claim 33, the CPU includes the gatekeeper coupled with the arbiter and transmitting to it the scheme (Akatsu et al column 11 lines 25-60).

36. Regarding claim 34, the CPU includes the gatekeeper coupled with the arbiter and selecting display control signals having access to the arbiter (Akatsu et al column 11 lines 25-60).

37. Regarding claim 35, the access control table is coupled to the arbiter and receiving indicia representative of the priority scheme (Akatsu et al column 10 lines 50-64, column 11 lines 10-25).

38. Regarding claim 36, the indicia includes a priority (Akatsu et al column 6 lines 5-28. Only one of these need be met to satisfy the claim).

39. Regarding claim 37, Akatsu et al show: requesting the master persistence attribute from a gatekeeper (column 6 lines 30-64, column 14 lines 25-55), assigning a set of priority rules to the gatekeeper via a configuration application program (column 8 lines 30-60, column 11 lines 25-60), the gatekeeper granting keys to the selected dominant application programs allowing access to an arbiter (column 6 lines 5-30), the arbiter examining an arbiter access control table storing the predetermined priority scheme (Akatsu et al column 10 lines 50-64, column 11 lines 10-25), the arbiter assigning the persistence attribute to the one of the plurality of dominant application

programs granting access to a display window (column 12 lines 27-62, column 8 lines 30-60).). Akatsu et al do not specifically state that the dominant program displays data concurrently with other programs while not being obscured by them according to a predetermined priority scheme, but do show displaying data for efficient viewing. Furthermore, Raheman does show displaying multiple program windows such that a dominant (active) one displays data concurrently with other windows while not being obstructed by them according to a predetermined priority scheme (abstract, Figures 12, 16, column 5 lines 30-54) to display data for efficient viewing. It would have been obvious to a person with ordinary skill in the art to have the dominant program in Akatsu et al display data concurrently with other programs while not being obscured by them, according to a predetermined priority scheme, because it would allow displaying of data for efficient viewing. Neither Akatsu et al nor Raheman specifically show that the dominant program itself overlaps other programs, but Akatsu et al for example do mention indicating priority to a dominant program. Furthermore, Sadamatsu shows indicating priority to a dominant or currently active program by diving to it within a stack and showing it overlapping those applications whose windows are under its window (abstract, Figure 2). This is done in Sadamatsu also for efficient viewing of displayed data, which is also taught by Raheman. Thus, it would have been obvious to a person with ordinary skill in the art to have the dominant program overlap other programs in the system suggested by Akatsu et al and Raheman, because it would allow an efficient way to view displayed data, while indicating priority to a dominant window.

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46. Claim 44 shows the same features as claim 1 and is rejected for the same reasons.

46. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection. Applicant's representative is invited to contact Examiner to discuss the new art.

47. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

48. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven P. Sax whose telephone number is (571) 272-

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46. Claim 44 shows the same features as claim 1 and is rejected for the same reasons.

46. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

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4072. The examiner can normally be reached on Monday thru Friday, 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on (571) 272-4063. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



STEVEN SAX
PATENT EXAMINER